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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,740	11/06/2001	Robert C. Chang	SANDP011	9137
10027	7590	06/16/2006	EXAMINER	
ANDERSON, LEVINE & LINTEL L.L.P.			WOOD, WILLIAM H	
14785 PRESTON ROAD			ART UNIT	
SUITE 650			PAPER NUMBER	
DALLAS, TX 75254			2193	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/005,740		CHANG ET AL.	
	Examiner		Art Unit	
	William H. Wood		2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-10,13,15-18 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 3-7,13,15-18 and 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 3-10, 13, 15-18 and 28-32 are pending and have been examined.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 3-7, 15-17, 26-27 and 31-32 are rejected under 35 U.S.C. 102(a) as being anticipated by **Graham** et al. (WO 01/78020 A1). For the sake of brevity, the rejections will not be repeated from the previous actions and are considered the same. Were appropriate, additional elements will be addressed.

Claims 3 and 13

Graham disclosed firmware and is for controlling the storing of data and executing of instructions on the memory storage device (page 1, line 31 to page 2, line 1; *executing software or firmware is storing and executing instructions*; page 38, lines 7-10; page 37, lines 18-22; page 39, line 28 to page 40, line 2).

Claim 31

Graham disclosed the system of claim 13, wherein the memory card comprises:

a flash memory comprising a plurality of storage elements (*page 1, line 26*); and

a controller, coupled to the flash memory (*page 1, line 23 and 31 to page 2, line 1*), the controller including the firmware (*at least while it is being executed*);

wherein the firmware is for allowing instructions to be executed by the controller (*page 2, line 1*).

Claim 32

Graham disclosed the system of claim 31, wherein the firmware includes in-system programming (ISP) support (*as originally for claim 7 and page 2, line 9, changing information*).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Graham** et al. (WO 01/78020 A1) in view of **Pua** et al. (US Patent Publication

2002/0194403). For the sake of brevity, the rejections will not be repeated from the previous actions and are considered the same.

5. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Graham** et al. (WO 01/78020 A1) in view of **Watanabe** (USPN 6,148,366). For the sake of brevity, the rejections will not be repeated from the previous actions and are considered the same. Were appropriate, additional elements will be addressed.

Claim 30

Graham and **Watanabe** disclosed the method of claim 28 wherein the at least first bit is arranged to substantially cause the firmware associated with the reader to set an internal flag to indicate that the in-system-programming updated of the firmware is supported (**Watanabe**: figures 3-4).

Allowable Subject Matter

6. Claims 8-10 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or suggest the claimed invention. Specifically, the prior art of record fails to teach or suggest communicably detaching and reattaching the reader with resetting the memory storage device, as recited in independent claim 8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments filed 10 February 2005 have been fully considered but they are not persuasive. Applicant argues: ¹⁾ **Graham** does not disclose firmware embedded within a command; ²⁾ the cited prior art fails to disclose "firmware"; and ³⁾ the cited prior art fails to disclose in-system programming support. The arguments are not persuasive as will now be discussed.

First, the phrase "embedding the new firmware into a first command" is sufficiently broad under a reasonable interpretation to read upon the cited prior art. Before even looking to the references, the phrase itself is analyzed. In this case, "embedded" could be any one of many ways to associate information/firmware with a command. Embedded offers no guidance or restriction on the format or even location of the firmware. Turning to **Graham** the elements to be found are a command and firmware embedded/associated with the command. **Graham** states "transfer information and commands" (page 38, lines 28).

Second, Applicant's own cited definitions of firmware support the rejections. "Firmware is a software program or set of instructions programmed

on a hardware device” according to the Sharpened Glossary. The Wikipedia reference agrees, “firmware is software that is embedded in a hardware device”. These statements do not refute the interpretation used by the rejections and even support that interpretation. Under a broadest reasonable interpretation of the claim language firmware can be applications programs along with the other examples of its use cited by Applicant.

Third, as indicated above in the rejections of the new claims the limitations are present. Having addressed Applicant’s concerns the rejections are maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In

Art Unit: 2193

no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

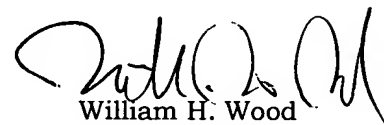
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 9:00am - 5:30pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)-272-3719. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR systems, see <http://pair-direct.uspto.gov>. For questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.



William H. Wood

Patent Examiner

AU 2193

June 10, 2006



**KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**